

Claims

I claim

1. A mobile device with a selective connecting function, the mobile device comprising:
an earphone including a detecting device for providing a status signal of a using status
of the earphone; and
a processor, including:
an auto-connecting module for executing an auto-connecting function;
a manual-connecting module for executing a manual-connecting function; and
a determining module, responsive to the status signal, for controlling the mobile
device to selectively execute the auto-connecting function and the manual-
connecting function.
2. The mobile device of claim 1, the mobile device further comprising:
a connecting device for connecting to the earphone, the connecting device having a
first terminal;
a transmission line, one terminal of the transmission line electrically connecting to the
processor for transmitting the status signal;
a voltage source; and
a resistor, one terminal of the resistor connecting to the voltage source, another
terminal of the resistor connecting to the first terminal of the connecting device
and another terminal of the transmission line;
wherein the detecting device connects to the connecting device, and controls the status
signal selectively being in a low level and a high level.

3. The mobile device of claim 2, wherein the detecting device includes:
a switch, one terminal of the switch connecting to ground, another terminal of the switch connecting to the first terminal of the connecting device; and
a control unit for controlling the switch.
4. The mobile device of claim 3, wherein the control unit includes a mechanical switch, and when the earphone is in a depressed state, the mechanical switch turns off the switch.
5. The mobile device of claim 3, wherein the control unit turns on the switch when the earphone is in an operation state.
6. The mobile device of claim 3, wherein the earphone further includes a hook and a pad rotatably connecting with the hook, when the hook clips an ear and rotates relatively to the pad, the control unit switch makes the earphone in the operation state.
7. The mobile device of claim 3, wherein the control unit includes a pressure sensor, when the earphone is placed on an ear to press the pressure sensor, the control unit turns on the switch.
8. The mobile device of claim 3, wherein the control unit includes a first temperature sensor for measuring a first temperature and a second temperature sensor for measuring a second temperature, the control unit turns on the switch when the first temperature is higher than the second temperature.

9. The mobile device of claim 3, wherein the control unit includes an ultrasonic transmitting device and an ultrasonic receiving device, when the ultrasonic receiving device receives an ultrasonic signal, the control unit turns on the switch.
10. The mobile device of claim 3, wherein the control unit includes an infrared ray transmitting device and an infrared ray receiving device, when the infrared ray receiving device receives no infrared ray signal, the control unit turns on the switch.
11. The mobile device of claim 2, wherein the connecting device includes an earphone socket.
12. A mobile phone with a selective connecting functions, the mobile phone comprising:
 - an earphone including a detecting device for providing a status signal according to a status of the earphone;
 - an earphone socket for connecting to the earphone, the earphone socket having a first terminal;
 - a transmission line, for transmitting the status signal;
 - a voltage source;
 - a resistor, one terminal of the resistor connecting to the voltage source, another terminal of the resistor connecting to the first terminal of the earphone socket and one terminal of the transmission line; and
 - a processor electrically connecting to another terminal of the transmission line and receiving the status signal from the transmission line, the processor including:
 - an auto-connecting module for executing an auto connecting function;
 - a manual-connecting module, for executing a manual-connecting function; and

a determining module, responsive to the status signal, for controlling the mobile device to selectively execute the auto-connecting function and the manual-connecting function.

13. The mobile phone of claim 12, wherein the detecting device includes:
a switch, one terminal of the switch connecting to ground, another terminal of the switch electrically connecting to the first terminal of the earphone socket; and
a control unit for controlling the switch.
14. The mobile phone of claim 13, wherein the control unit includes a mechanical switch, and when the earphone is in a depressed state, the mechanical switch turns off the switch.
15. The mobile phone of claim 13, wherein the control unit turns on the switch when the earphone is in an operation state.
16. The mobile phone of claim 13, wherein the earphone further includes a hook and a pad rotatably connecting with the hook, when the hook clips an ear and rotates relatively to the pad, the control unit makes the earphone in the operation state.
17. The mobile phone of claim 13, wherein the control unit includes a pressure sensor, when the earphone is placed on an ear to press the pressure sensor, the control unit turns on the switch.

18. The mobile phone of claim 13, wherein the control unit includes a first temperature sensor for measuring a first temperature and a second temperature sensor for measuring a second temperature, the control unit turns on the switch when the first temperature is higher than the second temperature.